

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 6,989,863 B1  
APPLICATION NO. : 09/384973  
DATED : January 24, 2006  
INVENTOR(S) : Hidekazu Takahashi

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON TITLE PAGE AT (54) TITLE

"AD" should read --AND--.

COLUMN 1

Line 3, "AD" should read --AND--.

COLUMN 4

Line 27, " $C_{SM}$ "} $\cdot G_{DCM}$ " should read -- $C_{SM}$ "} $\cdot G_{DCM}$ --.

COLUMN 5

Line 25, " $-2_T$ " should read -- $2N_T$ --; and


Line 26, " $(-2N_T+n_M)$ ." should read -- $(-2N_T+N_M)$ --.

COLUMN 6

Line 63, " $\phi_{CR}$ " should read -- $\phi_{GR}$ --.

Signed and Sealed this

Eighth Day of August, 2006



JON W. DUDAS  
*Director of the United States Patent and Trademark Office*